

College of Saint Benedict and Saint John's University

DigitalCommons@CSB/SJU

Honors Theses, 1963-2015

Honors Program

5-2015

Who Will Make the Cut? Gender Bias and Contrast Effects in Hiring Behavior

Molly L. Sullivan

College of Saint Benedict/Saint John's University

Follow this and additional works at: https://digitalcommons.csbsju.edu/honors_theses



Part of the [Psychology Commons](#)

Recommended Citation

Sullivan, Molly L., "Who Will Make the Cut? Gender Bias and Contrast Effects in Hiring Behavior" (2015). *Honors Theses, 1963-2015*. 80.

https://digitalcommons.csbsju.edu/honors_theses/80

This Thesis is brought to you for free and open access by DigitalCommons@CSB/SJU. It has been accepted for inclusion in Honors Theses, 1963-2015 by an authorized administrator of DigitalCommons@CSB/SJU. For more information, please contact digitalcommons@csbsju.edu.

Who Will Make the Cut? Gender Bias and Contrast Effects in Hiring Behavior

AN HONORS THESIS

College of Saint Benedict | Saint John's University

In Partial Fulfillment

of the Requirements for Distinction

in the Department of Psychology

by

Molly L. Sullivan

May, 2015

Who Will Make the Cut? Gender Bias and Contrast Effects in Hiring Behavior

Approved by:

Associate Professor of Psychology

Associate Professor of Psychology

Assistant Professor of Psychology

Chair, Department of Psychology

Director, Honors Thesis Program

Abstract

The present study examined stereotypical beliefs and contrast effects resulting from gender biases and their influence on hiring behavior. College student participants were asked to evaluate a male or female job candidate who was either applying for a feminine or masculine position. Additionally, the applicant's altruistic behavior was manipulated to either oppose or conform to the stereotype that women are more helpful than men. The results were not consistent with hypotheses. No evidence was found to support the idea that men and women are more likely to be hired for stereotypically gender-congruent positions, or that contrast effects mitigate these outcomes. These results contradict previous research on gender stereotypes and employee selection bias. Limitations and future research are discussed.

Contrast Effects and Gender Bias in Hiring Behavior

Although men and women have legal protection against gender discrimination, and such behavior is considered by society to be wrong, research suggests that gender stereotypes still exist and influence perceptions of men and women in everyday life. It has been repeatedly found in empirical studies that women are thought to possess lower mathematical ability than men (Jacobs, 1991; Steffens, Jelenec, & Noack, 2010; Tiedemann, 2000; Tomasetto, Alparone, & Cadinu, 2011). The stereotype that women are more emotional than men is another belief that permeates society (Hess, Senécal, Kirouac, Herrera, Philippot, & Kleck, 2000; Timmers, Fischer, & Manstead, 2003; Plant & Hyde, 2000). And one of the most commonly studied of gender stereotypes is that only men, or those with masculine qualities, make successful leaders. Bosak and Sczesny (2011) found that participants would more readily hire a man than a woman for a leader position. Moreover, a meta-analysis summarizing the results of dozens of studies researching this stereotype found that among all subgroups, masculinity was demonstrated as a leader stereotype (Koenig, Eagly, Mitchell, & Ristikari, 2011). Most of these gender stereotypes are not accurate, that is, men and women do not actually differ the way the stereotypes suggest. Studies have found evidence opposing the notion that men have superior mathematical abilities (Hall, Davis, Bolen, & Chia, 1999; Voyer & Voyer, 2014) and there is little to no empirical support that women are the more emotional sex (Barrett, Robin, Pietromonaco, & Eyssell, 1998; Else-Quest, Higgins, Allison, & Morton, 2012). Nonetheless, the evidence shows that although gender stereotyping is unsupported, people continue to rely on it when forming impressions of others and making judgments about them.

Stereotypes stem from the social construction of gender roles: attitudes, beliefs, and expectations of how individuals should behave based on their gender. These biased perceptions

not only influence the way we presume men and women should or should not act, they also guide our expectations of the qualities and abilities we think men and women do or do not possess. A clever study investigated this bias by asking participants to indicate what traits are important for men and women to have in American society, as well as traits that are typical of each gender. The results showed clear patterns of gendered traits in each category (Prentice & Carranza, 2002). Whereas the top traits important for women to have were things like sensitivity, being warm and kind, and having an interest in children, the top traits important for men were to be self-reliant, athletic, and to have a business-sense (Prentice & Carranza, 2002). In addition, the qualities most important for women *not* to be were rebellious, stubborn, and controlling, whereas for men these qualities were emotional, approval seeking, and impressionable (Prentice & Carranza, 2002). Essentially the stereotypical woman is represented as a sensitive and motherly individual who refrains from confrontation and the stereotypical man is macho, independent, and unemotional. This evidence makes it clear that people have expectations for how men and women should and should not be.

The perceived qualities and abilities of men and women have been shown to be biased in other contexts as well. Male and female professors are perceived to have differing qualities that adhere to gender roles (Basow, 1995). Moreover, when students rated a professor's qualities after reading his or her syllabus, the syllabus supposedly belonging to a female professor was judged to be warmer than the hypothetical male professor's, even though the syllabi were identical (Anderson, 2010). Students made judgments that reflected their underlying biases on the different traits men and women possess.

Role Congruity Theory

Eagly and Karau (2002) developed role congruity theory as a theoretical explanation for stereotypical judgments based on social roles. The theory maintains that when the attributes one is expected to have by virtue of his or her social group are incongruent with the attributes required for success in a particular social role, prejudice can potentially result. This incongruence can lead an outside perceiver to interpret the individual in a negative way because he or she violated expectations.

This theory can be used to explain the mechanisms behind gender stereotyping. Gender roles have been shown to influence our impressions of how men and women should and should not act (Anderson, 2010; Basow, 1995; Prentice & Carranza, 2002) and social roles necessitate specific traits be present for success. If a man occupies a social role that is incompatible with his social group's (male) stereotypes, he will be perceived less favorably than an individual whose social group's stereotypes are consistent with the social role. For example, the social role of a policeman generally conjures masculine attributes. If a woman is being judged in this social role, role congruity theory would posit she would be evaluated less favorably than an equivalent man because feminine gender stereotypes do not cohere as well to the policeman role as masculine gender stereotypes. While some gender stereotypes have an accurate basis and may be useful in determining success in a social role, it is more frequent for this process to create an unwarranted bias that causes harm.

Research has thoroughly documented this bias, thereby supporting role congruity theory. One study found participants rated a lecture supposedly given by a man more positively than an identical lecture given by a woman (Abel & Meltzer, 2007). We can conclude that the lecturer's gender was the factor causing the bias because it was the only difference between the two

lectures. Apparently, the social role of professor is more congruent with male stereotypes than female ones. Biernat and Manis (1994) found that male and female authors were given higher ratings when they wrote an article that had reflected the gender appropriate standpoint. That is, an article written by a man about fishing was rated higher than the identical article written by a woman, and an article written by a woman about cooking was rated higher than an identical article written by a man (Biernat & Manis, 1994). Another study found that male attorneys were given higher ratings than their female counterparts, even when the females were judged more favorably in a written evaluation (Biernat, Tocci, & Williams, 2012). Even when there were no differences in the actual abilities of the men and women, men were rated higher because of the perceived congruence of attributes. Okimoto (2010) presented participants with two identical politicians except for their gender and found that the female candidate was more likely to be perceived as having power-seeking behavior than the equally depicted male candidate. Here the incongruence of the social role and group stereotypes resulted in the spontaneous perception of an undesirable trait (power-seeking behavior) in the woman. This demonstrates how gender stereotyping can lead to harmful judgments that seem to lack legitimacy.

This unjustified gender stereotyping can even cause damage in situations designed to combat bias: employee evaluations and hiring scenarios. A hypothetical man's application was more likely to be hired for a masculine position (personnel technician) than the identical application of a woman, and the same hypothetical woman's application was more likely to be hired for a feminine position (editorial assistant) than the identical man's application (Cohen & Bunker, 1975). This gender-occupation bias has been repeatedly found among empirical studies (Frauendorfer & Schmid Mast, 2013; Koch, D'Mello, & Sackett, 2014). According to the research, it is evident that gender stereotypes are not simply harmless beliefs held internally by

individuals; men and especially women can be harmed by biased evaluation and perception in situations as important and allegedly impartial as employment.

Several studies have done additional manipulation to further understand the process of gender stereotyping from a role-congruity perspective. Hypothetically, the inconsistency between the social role and gender stereotype is created by manipulating the sex of the subject (male or female) and the type of social role (masculine or feminine). However, by manipulating a piece of individuating information about the subject to provide an additional piece of evidence inferring the subject's gender, we can explicate the deeper processes by which gender stereotyping operates. Glick, Zion, and Nelson (1988), like others, found that male applicants were preferred for a masculine position and female applicants for a feminine position. But when a piece of individuating information was given via a cover letter that was designed to reflect either masculine, neutral, or feminine characteristics, the applicants with corresponding individuating information to the job position (masculine and masculine or feminine and feminine) were preferred over applicants with mismatched information (Glick et al., 1988). This tells us that it is not only the sex of the applicant that determines their suitability to fill a social role, but also the level of agreement between their perceived characteristics and the social role.

The use of individuating information has been shown to highlight the processes of role-congruity theory using other stereotypical traits as well. When equally portrayed male and female managers in a male-dominated field were reviewed, participants' ratings depended upon the prominence of success. If the success was made explicit, emphasizing the woman's deviation from expectations, the female manager was liked less and thought to be more hostile than the equivalent male manager (Heilman, Wallen, Fuchs, & Tamkins, 2004). But if the success was ambiguous, the man and woman did not differ on perceived likability and hostility (Heilman et

al., 2004). A similar study found that the variable of communality determined a woman's ratings in a male-dominated field. When a male and female manager were depicted with no individuating information of communality, the male manager was perceived to be more likable, less hostile, and better suited as a boss than the identical female manager (Heilman & Okimoto, 2007). However, if the female manager opposed the masculine stereotype and was depicted as being communal, she was rated more likable and less hostile than the male manager (Heilman & Okimoto, 2007). These studies support role-congruity theory as a way to understand the mechanisms of gender stereotyping and substantiate the importance of gendered characteristics and how they influence perceptual judgment.

Gender stereotyping not only causes biased judgments of an individual from an outside evaluator; it can also affect the way individuals view themselves. In this way, the stereotype becomes internalized as an attitude or belief in the individual about his or her abilities that reflects the biased nature of the stereotype. Oswald (2008) found that women who identified with the female gender perceived themselves as more fit for feminine positions than masculine positions. In addition, job descriptions utilizing words associated with masculine stereotypes (leader, competitive, dominant) were found to have lower appeal among women than job descriptions using feminine wording (support, understand, interpersonal) (Gaucher, Friesen, & Kay, 2011). It is evident that stereotypical beliefs permeate beyond an outsider's judgment and influence the self-concept of individuals as well. For this reason, it is crucial that research continues to tease apart the mechanisms of gender stereotyping so we can reverse the trend of unjust internal and external judgments.

Shifting Standards Model

The ways in which men and women can be affected by gender stereotyping are varied and do not always follow how initial expectations dictate. Biernat (2003) proposed a model to predict the evaluative outcome of stereotypical judgments based on the concept of shifting standards. The shifting standards model suggests that gender stereotypes can operate in complex ways that depend on the judgment standard used. If a gender stereotype maintains that men and women differ on some variable, men and women will be held to different standards on that variable. For example, the stereotype that men have superior mathematical ability to women will set the average or standard for men higher than the standard set for women. As a result, subjective judgments comparing men and women are biased because they have inherently different reference points. When a woman is described as “good at math,” it doesn’t mean the same thing as saying a man is “good at math” because the two groups are not on an objective, comparable scale (Biernat, 2003).

On the other hand are common-rule scales, objective measures such as IQ scores or ranking systems that put men and women on an equal playing field and therefore eliminate the bias of subjective judgments. These methods seem to bring out the stereotypically-coherent assimilative effects of stereotypes, i.e. a man thought to have a higher ACT score in math than a woman. But if the measure is asking for a subjective judgment, often times the unanticipated contrast effect can occur.

With contrast effects, the subject of a stereotype is perceived in a counterstereotypical way, or a way that opposes the initial stereotype’s claim. Women may be perceived to have exceptional mathematical ability if they have a Ph.D. in Math, because this so clearly violates the expectation they will be mathematically incompetent compared to men. Here, an equal man with

a Ph.D. in math may be viewed less positively than the woman because he is held to a higher standard than the woman. The idea is that if two people share the same qualities or display the same behavior, but are judged to have inherently different abilities because of their group membership, then the identical qualities and behaviors will be perceived differently. An individual who violates a stereotype may actually be judged more positively than an individual who does not.

Research has investigated the way contrast effects manifest themselves in gender stereotyping through the examination of men who violate stereotypes. One study by Meltzer and McNulty (2011) found that men who were described as nurturing were rated more favorably than women who were described equally as nurturing. If the two were rated on a common-rule scale, the shifting standards model would predict the woman would be considered more nurturing than the man. But a subjective measure was used (7 point Likert scale) and as a result, the findings reflected a contrast effect. The negative stereotype that men are not nurturing combined with the individuating information of an especially nurturing man caused the man to be perceived in a way that opposed the initial stereotype. The woman received lower evaluations even though she was described identically to the man; she was harmed by a stereotype initially intended to favor her. Similarly, the man received disproportional positive evaluations and actually benefitted from a stereotype that would usually harm him (Meltzer & McNulty, 2011).

Another study found similar results, this time testing the variable of altruistic behavior. Heilman and Chen (2005) conducted a study that presented participants with information about a male or female employee who was either described to have shown altruistic behavior, not shown altruistic behavior, or neither. The results showed that a man who did the altruistic behavior was evaluated more favorably than a woman who did the same altruistic behavior (Heilman & Chen,

2005). Here the negative stereotype that men are not particularly helpful combined with the presence of a particularly helpful man resulted in a contrast effect that caused the man to receive benefits from his behavior that the woman did not receive. Additionally, the woman who did not do the altruistic behavior was evaluated less favorably than the man who also did not do the altruistic behavior (Heilman & Chen, 2005). A woman who isn't depicted as particularly helpful experiences a negative outcome that a similar man does not experience because of the shifting standards of subjective evaluation. Contrast effects can work in two directions; not only does the man receive excessive benefits that an equal woman does not receive, but the woman encounters undeserved punishment that an equal man never has to face.

These findings suggest that under the right circumstances, gender stereotyping results in counterstereotypical contrast effects. Although the contrast effect subdues the initial unfavorable outcomes for the group that is negatively stereotyped, it results in unfavorable outcomes for the group being compared. Men who are subjected to negative stereotypes but defy them no longer suffer the unfavorable judgments. However, women who are compared to these men do not get the same benefits from displaying equal behavior or ability because the standards are shifted.

The Current Research

As demonstrated, both role congruity theory and the shifting standards model are effective and empirically supported demonstrations of how the inner mechanisms of gender stereotypes function. Role congruity theory illustrates the importance of perceived congruence between one's attributes and one's social role in judgment making. The shifting standards model clarifies how stereotypes can result in contrast effects that have unexpected outcomes for group members. Past research has neglected to determine how gender stereotypes operate when the assumptions of both of these systems are combined and tested together. More specifically, no

study yet has investigated the potential ways in which contrast effects emerge when in the presence of gender congruent or incongruent information in a hiring scenario. Like the research suggests, men and women are evaluated more favorably for positions that stereotypically correspond to their gender (Biernat & Manis, 1994; Cohen & Bunker, 1975; Frauendorfer & Schmid, 2013). But what would happen if the individual being evaluated was manipulated to display behavior in opposition with the notion of the stereotype, which research suggests may elicit contrast effects (Meltzer & McNulty, 2011; Heilman & Chen, 2005)?

The present study will investigate the differences in the way men and women are evaluated for a stereotypically masculine or feminine position by manipulating the individuating information given about the men and women to either oppose or support a gender stereotype. Specifically, participants will evaluate a job candidate that is either described as having displayed altruistic behavior (helpful condition), displayed neutral behavior (control condition), or not displayed altruistic behavior (unhelpful condition) by reviewing a man or a woman's job application for either the position of Executive Chief of Staff (masculine) or Executive Secretary (feminine).

Hypotheses

According to previous research on contrast effects, it is predicted that a helpful man will be evaluated more favorably than an equally helpful woman. Similarly, due to the contrast effect, an unhelpful woman will be evaluated less favorably than an equally unhelpful man. And according to role-congruity theory, it is hypothesized that men and women will both be evaluated more favorably for positions that cohere to gender stereotypes. Though my hypotheses are based on the general principles of both role congruity theory and the shifting standards model, my specific predictions do not identically replicate these findings as they stand on their own. Instead,

the contrast effect elicited through the presentation of individuating information (helpfulness) combined with the presentation of gendered positions is expected to complicate this process and produce interactions.

Concerning the hirability ratings, a three-way interaction is hypothesized between job title, applicant gender, and helpfulness condition. In the Executive Chief of Staff position, female applicants in the unhelpful condition will receive lower hirability ratings than applicants in any other condition, and male applicants in the helpful condition will receive greater hirability ratings than applicants in any other condition. Moreover, male applicants will always receive greater hirability ratings than female applicants in the Executive Chief of Staff position. However, a different pattern is expected in the Executive Secretary position. It is anticipated that male applicants in the helpful condition will receive greater hirability ratings than applicants in any other condition and female applicants in the unhelpful condition will receive lower hirability ratings than applicants in any other condition, but in addition, female applicants are projected to receive greater hirability ratings than male applicants in the control condition.

In regard to the helpful ratings, a two-way interaction is predicted between helpfulness condition and gender of applicant such that female applicants in the unhelpful condition will have lower helpfulness ratings than applicants in any other condition. Conversely, male applicants in the helpful condition will have greater helpfulness ratings than applicants in any other condition. Bulleted representation of these hypotheses is presented below:

Hirability Rating

- For the Executive Chief of Staff position, men will receive greater hirability ratings than women across all helpfulness conditions.

- For the Executive Chief of Staff position, women in the unhelpful condition will receive the lowest hirability ratings.
- For the Executive Chief of Staff position, men in the helpful condition will receive the greatest hirability ratings.
- For the Executive Secretary position, women in the control condition will receive greater hirability ratings than men in the control condition.
- For the Executive Secretary position, women in the unhelpful condition will receive the lowest hirability ratings.
- For the Executive Secretary position, men in the helpful condition will receive the greatest hirability ratings.

Helpfulness rating

- In the control condition, women will be rated more helpful than men in both the Executive Chief of Staff and Executive Secretary positions.
- In the unhelpful condition, women will be rated less helpful than men in both the Executive Chief of Staff and Executive Secretary positions.
- In the helpful condition, men will be rated more helpful than women in both the Executive Chief of Staff and Executive Secretary positions.

Method

Participants

Participants included 158 students between the ages of 18 and 25 enrolled in a small, Catholic, liberal arts institution in the Midwest. The sample consisted of 102 female (65.2%) and 54 male students (34.8%). Two neglected to indicate gender. Class year distribution was as follows: 57 first-year students (36.1%), 55 sophomores (34.8%), 27 juniors (17.1%), and 15

seniors (9.4%). Four students neglected to indicate class year. Participants were recruited through Introductory Psychology, Abnormal Psychology, and Behavioral Statistics courses and received partial course credit or extra credit for participation. All participants were randomly assigned to one of twelve conditions.

As a manipulation check in the conclusion of the questionnaire, participants were asked to indicate the gender of the applicant they had just reviewed and the job title of the position that the applicant was applying for. There were 24 participants who failed to correctly identify the correct applicant gender or job title and were excluded from the study (see Table 3). Of the remaining 134 participants, 49 were men (36.6%), 83 were women (61.9%) and two neglected to respond. The new sample consisted of 48 first-year students (35.8%), 48 sophomores (35.8%), 20 juniors (14.9%), and 15 seniors (11.1%). Three failed to indicate class year.

Design

This study is a 2 (Executive Secretary or Executive Chief of Staff) by 2 (male applicant or female applicant) by 3 (unhelpful condition, control condition, or helpful condition) between-subjects factorial design.

Materials

Job description. The job descriptions were developed by Biernat and Fuegen (2001) and included a three-paragraph description of the job requirements for a fictitious position. As in Biernat and Fuegen's (2001) study, all participants read an identical job description, but the title varied to indicate either a feminine (Executive Secretary) or masculine (Executive Chief of Staff) position (see Appendices A and B).

Job position questionnaire. This questionnaire contained four multiple choice questions about the title, gender distribution, average salary, and job outlook for the position the participant

has just reviewed, although the primary item of interest was gender distribution. The gender distribution question read: “What percentage breakdown would you estimate is representative of men and women who occupy that position across the U.S.?” The range began with 30% men - 70% women, and increased/decreased with increments of 10%, ending with 70% men - 30% women. This multiple choice question had a total of five choices (see Appendix C). The purpose of this question doubles as a manipulation check and a catalyst to get the participant thinking about the gender of the position.

An additional question of interest on this questionnaire was the salary item. The question reads: “What would you estimate the average annual salary is for employees in that position across the U.S.?” Since men make more money than women in America, this question was included to provide insight to the ideas participants have about the gendered positions. Choices ranged from less than equal to \$30,000 to higher than or equal to \$60,000, increasing by increments of \$5,000 for a total of seven options (see Appendix C).

Resume. All participants reviewed an identical resume, except the name on the resume varied to indicate a male applicant (David Michael Johnson) or a female applicant (Amy Marie Johnson). The resume stated the individual had been previously employed as an Executive Assistant, General Office Clerk, and Customer Specialist and was roughly 35 years of age. Based on information from Biernat and Fuegen (2001), the resumes were created to be moderate in caliber (see Appendices D and E).

Evaluation form. The evaluation form was presented to participants as a tool used by personnel managers to get better insight into an applicant’s work capabilities. Participants were told the form was filled out by either a coworker, subordinate, or supervisor of the applicant in his or her previous employment position (Global Systems International). However, to make the

information in the form more convincing, all participants read an evaluation done by the applicant's previous coworker. In both conditions, the form had ratings of David or Amy on a Likert scale from 1 to 5 on qualities such as dependability, efficiency, and versatility. The ratings given by the supposed coworker were either good (4) or excellent (5) on all qualities.

Next, the form gave a description written by the coworker to describe David/Amy's typical work behavior. In each helpfulness condition, the coworker's statement began (using *David* as an example):

David arrives to work on time and makes sure his work area is always covered. His work is completed on time with minimal errors. He strives to improve work performance, takes pride in his work, and has shown he is a team player. David is usually able to answer customer questions and uses good judgment in solving problems and working with others. He adjusts moderately well to changes in the work place.

In the helpful and unhelpful conditions, the coworker's statement continued:

Once I was in a panic because I had to make copies of some presentation materials for an important meeting the next morning. The copy machine broke down on me and would not collate or staple the pages. It was 5:15 and all the support staff was gone, and everyone else was preparing to go out for another coworker's birthday dinner. We'd all been looking forward to it. I ran around looking for help to manually collate and staple the 500 pages.

In the helpful condition, the statement concluded with, "*When David learned what had happened, he immediately volunteered to help me even though he would miss part of the dinner. That's just the way David is*" (see Appendix F). In the unhelpful condition, the statement concluded with, "*When David learned what had happened, he said he could not help me because*

he was on his/her way to the party but suggested I try to find a copy shop that was still open. That's just the way David is" (see Appendix G).

The coworker's statement in the control condition concluded with, "*Once I was at an employee meeting where it was David's responsibility to present a status report to the group on a recent project being developed. David's presentation was informative and clear. He made sure to keep the meeting on schedule and he provided us with handouts. That's just the way David is"* (see Appendix H). This statement was meant to convey the behaviors of an average employee who neither underperforms nor exceeds expectations. Unlike the helpful and unhelpful conditions, I anticipate it will fail to evoke any emotional response from participants, therefore, preventing any stereotypical judgments. This response was written using a number of descriptors used to define the average employee (Sample Performance Comments, 2014).

The method described above was adapted from Heilman and Chen (2005). In the helpful and unhelpful conditions, the descriptions of typical work behavior were identical to those used by Heilman and Chen (2005) except for the first five sentences in each condition. I made this addition to emphasize the mediocrity of the employee's ability and to equate the level of information given in the experimental conditions with the control condition.

Questionnaire. The questionnaire asked the participant to rate the applicant in a number of different ways. First, the participant completed three measures assessing how hireable they viewed the applicant on a seven point scale. The first question read, "Should this person be hired?" and had a range of 1 (*Should definitely not be hired*) to 7 (*Should definitely be hired*). The second question read, "Is this person a good fit for the job?" and ranged from 1 (*An extremely bad fit*) to 7 (*An extremely good fit*). The final question read, "How successful would this person be in this position?" and had a range of 1 (*Extremely unsuccessful*) to 7 (*Extremely*

successful). A composite variable titled “hirability” was created by summing the scores of these three items. The possible range of scores was 3-21, where higher scores indicate a higher likelihood of the applicant being hired. Cronbach’s alpha for the hirability variable was .91. Following the three hirability measures, participants were asked to explain their responses in an open-ended format.

Next the participant evaluated the applicant’s personality by indicating how strongly he or she agreed the applicant possessed 27 personality traits using a seven point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Of these personality characteristics, the primary item of interest was “helpful.” This single measure served as the helpfulness variable to test my predictions about altruistic behavior. The possible range of scores falls between 1 and 7, where higher scores indicate greater willingness to help. The large amount of personality traits was included to resemble a true, comprehensive personality assessment and reduce participant suspicion.

Subsequent to the 27 personality trait items, the participant was asked to describe the applicant’s personality in his or her own words in an open-ended format. The questionnaire also utilized a manipulation check asking participants to indicate the gender and position applied for of the applicant they just evaluated. Lastly, participants answered several demographic questions (see Appendix I).

Procedure

The experiment was run in sessions of 2-30 participants at a time. Upon arrival, participants first completed a consent form and then were seated at a desk and given a manila envelope. The experimenter then verbally gave all participants the following cover story:

Good evening/afternoon everyone and welcome to this experiment! I just want to start by thanking you all for coming and participating in this study. My name is Molly Sullivan and I'm an intern this semester for the CSB/SJU Human Resources Department on campus. As a part of my internship, I'm working on a project to investigate the differences between the way laypeople and experts make decisions. A lot of the work the Human Resources Department does involves evaluating job applications and hiring people for various positions. This process is referred to as "personnel selection." What I'm interested in as a part of this project is to see how the general public assesses job applicants in comparison to the way personnel directors assess job applicants. Your task will be to imagine that you are a personnel director that is responsible for evaluating a potential job candidate. You will review several materials and fill out two questionnaires.

I just want to emphasize that the files you will be reading through do belong to an actual person who was hired and employed in an organization somewhere in Minnesota. We ask that you please respect the practices of the CSB/SJU Human Resources department and maintain the confidentiality of their personal information. Your task will be to simply read through the materials and complete the surveys, so keep that in mind. Although all of these individuals *were* hired, not all of them turned out to be a *good* hire. I encourage you to please use your very best judgment when rating the applicant and determining whether or not the applicant should be hired.

Participants were then informed that their folders contain a job description, a questionnaire, a resume, an evaluation form, and a second questionnaire. After a brief explanation of these materials, participants were instructed to review the documents, consider the applicant's fit for the position, and fill out the questionnaire as if they were the one making the

official hiring decision. Upon completion of the questionnaire, participants were debriefed and thanked for their participation.

Results

If the manipulation used in this study was successful, participants reading the job description titled “Executive Secretary” should have considered the position to be generally feminine, and participants reading the job description titled “Executive Chief of Staff” should have considered the position to be generally masculine. An independent-samples t-test on the gender distribution item in the Job Position Questionnaire revealed that the Executive Secretary position ($M = 2.24$, $SD = 1.34$) was considered to have a higher women-to-men ratio than the Executive Chief of Staff position ($M = 4.08$, $SD = 0.98$), $t(132) = -9.16$, $p < .001$. Additionally, there was a significant difference in the estimated annual salary of each position, $t(132) = -4.49$, $p < .001$. The Executive Chief of Staff position ($M = 5.73$, $SD = 1.23$) was estimated to earn more than the Executive Secretary position ($M = 4.71$, $SD = 1.40$).

It was hypothesized that for the Executive Chief of Staff position, men would receive greater hirability ratings than women across all helpfulness conditions. Women were expected to receive greater hirability ratings in the Executive Secretary position, but only in the control condition. Therefore, a three-way interaction was predicted, such that the effect of applicant gender would vary across job title and helpfulness conditions. Hirability ratings were measured using a 2 (applicant gender) x 2 (job title) x 3 (helpfulness) ANOVA (see Table 1). There was a main effect for helpfulness condition, $F(2, 122) = 13.38$, $p < .001$, $\eta^2 = .18$. Post hoc tests revealed that unhelpful applicants ($M = 13.74$, $SD = 2.97$) had significantly lower hirability ratings than applicants in both the control ($M = 16.34$, $SD = 2.60$) and helpful ($M = 16.07$, $SD = 2.11$) groups ($p < .05$). There was no significant difference between the control and helpful

groups. The main effect for applicant gender was not significant, $F(1, 122) = 1.89, p > .05, \eta^2 = 0.02$, nor was the main effect for job title, $F(1, 122) = 1.85, p > .05, \eta^2 = 0.02$. Contrary to my hypothesis, the three-way interaction was also not significant, $F(2, 146) = 1.41, p > .05, \eta^2 = 0.01$.

Concerning participant ratings of applicant helpfulness, it was predicted that men in the helpful condition would be considered more helpful than any other applicants, and women in the unhelpful condition would be considered less helpful than any other applicants. In other words, a two-way interaction between helpfulness condition and applicant gender was anticipated. A 2 x 3 ANOVA was conducted on the helpfulness rating (see Table 2). There was a statistically significant main effect for helpfulness condition, $F(2, 128) = 45.14, p < .001, \eta^2 = .41$. A post hoc test revealed that applicants in the helpful condition ($M = 6.40, SD = 0.79$) were rated more helpful than applicants in the control condition ($M = 5.78, SD = 0.72$), $p < .05$. Additionally, applicants in the control condition and the helpful condition were considered more helpful than applicants in the unhelpful condition ($M = 4.20, SD = 1.60$), $p < .001$. There was also a significant main effect for applicant gender, $F(1, 128) = 3.91, p < .05, \eta^2 = .03$. Female applicants ($M = 5.63, SD = 1.36$) were rated to be significantly more helpful than male applicants ($M = 5.16, SD = 1.57$). Contrary to my hypothesis, there was no significant interaction, $F(2, 128) = 0.94, p > .05, \eta^2 = .01$.

Discussion

As expected, manipulating the title of the position described was successful in creating differences in the ways in which the position was evaluated. Using the title “Executive Secretary” resulted in judgments associated with feminine positions, whereas using the title “Executive Chief of Staff” resulted in judgements associated with masculine positions.

Participants who were given a job description with the feminine title considered that position to be occupied by a higher percentage of women than those who were exposed to the masculine title. Likewise, the participants who were given a job description with the masculine title considered that position to be occupied by a higher percentage of men than those exposed to the feminine title. In addition to gender distribution of the positions, there were also differences in the estimated salary of employees occupying those positions. Participants who reviewed the job description of Executive Chief of Staff projected a figure of annual earnings that was significantly higher than participants who reviewed the job description of Executive Secretary. This suggests the manipulation of job title was successful in creating gendered positions that were considered unequal in terms of both gender distribution and salary.

Contrary to my predictions, there was no difference in hirability ratings for men and women applying for gendered positions. Men were not more likely to be hired for a masculine position than women, and women were not more likely to be hired for a feminine position than men. The congruence or incongruence of the applicant's gender with the gender of the employment position did not result in differences in their hirability ratings. In addition, there was no evidence of a contrast effect elevating or deflating hirability based on one's gender combined with the instance or absence of altruistic behavior. My hypothesis suggesting an interaction would occur between the applicant's gender, job title, and helpfulness condition for the hirability rating was not supported.

Although the predicted interactions were nonsignificant, there was a significant main effect for helpfulness condition on the hirability measure. Participants who read about the unhelpful applicant were less likely to hire the applicant than participants who read about the applicants in the control or helpful conditions. This suggests that the altruistic behavior displayed

in the summary of the applicant's typical work behavior in the employee evaluation form was successful in creating differences in the perceived character of the applicant. Although the applicants who displayed altruistic behavior and the control group applicants did not significantly differ, they both were given higher hirability ratings than the applicants who failed to display altruistic behavior. It seems that the altruistic behavior shown was only influential on hiring decisions when the applicant failed to demonstrate helpfulness. Although my hypotheses were not overall supported, this finding maintains the validity of the helpfulness variable.

The significant influence of helpfulness condition on applicant ratings was also found when analyzing the ratings of helpfulness. There was a main effect for helpfulness condition in which there were differences in the helpfulness ratings between all three groups. Applicants in the helpful condition were considered more helpful than applicants in the control group, and applicants in the control group were considered more helpful than applicants in the unhelpful group. Again, this demonstrates the effectiveness of the manipulation using excerpts of varying typical employee work behavior. Moreover, the differences between all three groups depict a multilevel structure in which the control condition truly served as a control in that it was significantly different from the other groups.

There was also a main effect found for applicant gender on helpfulness ratings. Regardless of helpfulness condition, female applicants were considered to be more helpful than male applicants. Unlike my prediction that the typical work behavior demonstrated by the applicant would influence the helpfulness ratings of men and women, there was no significant interaction. The anticipated finding of contrast effects on the helpfulness variable was not realized. Rather, it seems there was a general consensus that female applicants were more helpful

than male applicants, regardless of what type of altruistic behavior they exhibited in a previous employment position.

These results do not correspond with previous literature. No support was given for role-congruity theory of stereotyping or the shifting-standards model as they pertain to subjective and biased evaluation of others. There was no evidence of employee selection bias in the form of greater opportunity of hire for men and women for masculine and feminine positions found in this study. Rather, the present study paints a more pleasant picture of current attitudes toward men and women. There was no measured gender bias in this representation of personnel selection, which suggests men and women were considered equally suitable for masculine and feminine employment positions. This does not support the finding that men and women are preferred for positions that are considered to cohere with their gender role (Biernat & Manis, 1994; Cohen & Bunker, 1975; Frauendorfer & Schmid, 2013).

Since there were no significant interactions for the hirability or helpfulness variables, these results also do not provide evidence of the contrast effects observed by Meltzer and McNulty (2011) and Heilman and Chen (2005). Men and women who defied expectations did not receive unwarranted benefits and disadvantages in this study, as research on contrast effects would suggest. Contrary to my hypotheses, men who displayed altruistic behavior were not evaluated more favorably than all other applicants, and women who failed to display altruistic behavior were not evaluated less favorably than all other applicants. Interestingly, the two-way ANOVA revealed that female applicants were actually *avored* over men in terms of the helpfulness rating, as they were considered more helpful than male applicants.

This particular finding could be interpreted as support for the idea that stereotypical beliefs about altruistic behavior are gendered: women are simply more helpful than men.

Previous research has demonstrated that helping behavior is consistent with feminine gender-role expectations (Eagly & Mladinic, 1989; Eagly & Steffen, 1984; Heilman, 2001). Participants may have relied on stereotypical ideas about gender to make their evaluative judgments of personality, regardless of the behavior demonstrated in a previous employment position. However, it's possible that other aspects of the present study's methodology and/or design played a role in the unpredicted results.

The sample size of 134 students poses the risk of being underpowered with the complex research design necessitating twelve conditions. Perhaps my hypotheses were unsupported simply because of a lack of statistical power. It's possible that the participants' education in psychological concepts may have posed challenges as well. Initially participants were to consist only of Introductory Psychology students, so to prevent students who had been exposed to gender stereotyping research in other psychology classes from being included. However, due to limited availability of participants in that pool, there simply were not enough students with the ability to be recruited. As a result, sophomore, junior, and even senior year students enrolled in Abnormal Psychology and Behavioral Statistics participated in the survey. While some of these students were not yet enrolled in upper level psychology courses, a portion of them were. It's possible these students were hypersensitive to the study's purposes because of exposure to research on gender stereotyping in other psychology courses. They may have intuitively picked up on the true nature of the study, gender stereotyping, and responded defensively or in socially desirable ways.

There is also the chance that the manipulations used in the present study did not elicit the expected responses, though all precautions were taken to improve the likelihood they would. The applicant portfolios, containing a job description, resume, and employee evaluation form, may

have generated hypothetical applicants that were seemingly qualified to succeed in the position, regardless of condition. As the mean for hirability among all participants was 15.3 on a 21 point scale (about 5 out of 7 on each hirability item), most applicants were considered suitable for the position. This illustrates that across the board, participants were very likely to hire the applicant. This may indicate the materials were created in such a way that the applicant was portrayed in a positive light rather than a neutral one. Perhaps the resume and employee evaluation form did not depict as average a job candidate as was intended. Since few participants were unlikely to hire the applicant, it seems these materials represented someone deserving of the position, no matter what the condition. Or, perhaps the lack of alternative applicants reduced participants' confidence that they should reject the applicant. If information about two hypothetical applicants was provided for participants with the intention they would compare and then give feedback on each, maybe stereotypical subjective decision making would take the forefront and be reflected in the results.

The present study raises questions about stereotypical beliefs about gender and personnel selection as they exist in a young, educated population. Since the results did not give support for stereotypical evidence for role-congruity theory and the shifting-standards model, perhaps these theories are no longer prevalent in this particular cohort. If the sample had been all first-year students, would the results have been the same? Or if a middle-aged population was recruited, would the same findings remain? Studies in the future should continue to investigate how stereotypical beliefs and hiring preferences differ among diverse populations.

This study gave a small amount of insight into a process that is very complex; therefore, future research should continue to examine the ways hiring behavior is influenced by stereotypical judgments. In the present research, there was a primary focus on the stereotype that

men are typically less altruistic than women. As such, a negative stereotype directed at men constricts this study's relevance to all gender stereotypes. A future study could use the same methodology but consider different types of gender stereotypes, perhaps a positive stereotype directed at men or a negative stereotype directed at women. Or, perhaps multiple stereotypes that favor and penalize both men and women could be used to investigate the interplay of stereotypical judgments. Additionally, stereotypes outside the realm of gender could also be examined, such as racial or ability status stereotypes. It would be beneficial and interesting to examine how hiring likelihood changes as a result of judgments beyond the scope of altruism.

Future research could also explore alternative measures to gather participants' beliefs and judgments of applicants. The present study utilized ratings scales with a range of responses from 1-7. Perhaps using a more concrete variable with a simple yes-or-no option would be more effective in reliably measuring participant beliefs. Using open-ended responses could also be valuable to research in the future because it could provide more detailed, richer information. Although this study did include open-ended responses, the analysis of such data is beyond the scope of this particular paper. However, it is not inconceivable that the open-ended responses data will be examined in the future. Analyzing the specific words participants use could bring to light new and intriguing findings, and future research would be wise to do so.

Another aspect of the research that could be expanded on is the level of training of the evaluator. The current research used student participants to function as personnel technicians and make hiring decisions. While the results still have meaning and important implications, there may be value in observing the evaluation decisions of professionals trained in hiring decisions. Targeting a cohort with influence throughout the hiring process that is currently in effect for all

job applicants, as well as experience in the field, would be an interesting and natural progression in this line of research.

It would also be beneficial for future research to continue examining the manifestations of contrast effects and how they can potentially influence perceptions of ability. This topic should be expanded beyond evaluations of job applicants for hire. Other kinds of evaluation could be studied, such as evaluation of a current employee, evaluation of a subordinate, or evaluation of a performance. The evidence shows the presence of contrast effects in some contexts, but it is reasonable to infer they could emerge in others as well. Stereotypes filter into every aspect of our lives. Research dedicated to the understanding of them should do the same.

Although gender stereotyping is unacceptable societally, intuitively, and legally, research supports the claim that it still subsists at the root of our thoughts and behaviors. It subtly pervades the ways in which we attempt to make objective decisions and judgments. While the present study does not give evidence for gender stereotyping in evaluative hiring assessment, the topic is nowhere near totally explicated. Further exploration of the relationship between the concepts of role-congruity and contrast effects is warranted; for only by experimentally testing topics so subjective in nature can we really begin to comprehend their impression on our lives.

References

- Abel, M. H., & Meltzer, A. L. (2007). Student ratings of a male and female professors' lecture on sex discrimination in the workforce. *Sex Roles*, 57, 173-180. doi:10.1007/s11199-007-9245-x
- Anderson, K. J. (2010). Students' stereotypes of professors: An exploration of the double violations of ethnicity and gender. *Social Psychology of Education*, 13, 459-472. doi:10.1007/s11218-010-9121-3
- Barrett, L., Robin, L., Pietromonaco, P. R., & Eyssell, K. M. (1998). Are women the "more emotional" sex? Evidence from emotional experiences in social context. *Cognition & Emotion*, 12, 555-578. doi:10.1080/026999398379565
- Basow, S. A. (1995). Student evaluations of college professors: When gender matters. *Journal of Educational Psychology*, 87, 656-665. doi:10.1037/0022-0663.87.4.656
- Biernat, M. (2003). Toward a broader view of social stereotyping. *American Psychologist*, 58, 1019-1027. doi:10.1037/0003-066X.58.12.1019
- Biernat, M., & Fiegen, K. (2001). Shifting standards and the evaluation of competence: Complexity in gender-based judgment and decision making. *Journal of Social Issues*, 57, 707-724. doi: 10.1111/0022-4537.00237
- Biernat, M., & Manis, M. (1994). Shifting standards and stereotype-based judgments. *Journal of Personality and Social Psychology*, 66, 5-20. doi:10.1037/0022-3514.66.1.5
- Biernat, M., Tocci, M. J., & Williams, J. C. (2012). The language of performance evaluations: Gender-based shifts in content and consistency of judgment. *Social Psychological and Personality Science*, 3, 186-192. doi:10.1177/1948550611415693

- Bosak, J., & Sczesny, S. (2011). Gender bias in leader selection? Evidence from a hiring simulation study. *Sex Roles*, 65, 234-242. doi:10.1007/s11199-011-0012-7
- Clow, K. A., Ricciardelli, R., & Bartfay, W. J. (2014). Attitudes and stereotypes of male and female nurses: The influence of social roles and ambivalent sexism. *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement*, 1, doi:10.1037/a0034248
- Cohen, S. L., & Bunker, K. A. (1975). Subtle effects of sex role stereotypes on recruiters' hiring decisions. *Journal of Applied Psychology*, 60, 566-572. doi: 10.1037/0021-9010.60.5.566
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573-598. doi:10.1037/0033-295X.109.3.573
- Eagly, A. H., & Mladinic, A. (1989). Gender stereotypes and attitudes toward women and men. *Personality and Social Psychology Bulletin*, 15, 543-558.
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of Personality and Social Psychology*, 46, 735-754.
- Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin*, 138, 947-981. doi:10.1037/a0027930
- Frauendorfer, D., & Schmid Mast, M. (2013). Hiring gender-occupation incongruent applicants: The positive impact of recruiter interpersonal sensitivity. *Journal of Personnel Psychology*, 12, 182-188. doi:10.1027/1866-5888/a000095

- Gaucher, D., Friesen, J., & Kay, A. (2011). Evidence that gendered wording in job advertisements exists and sustains gender inequality. *Journal of Personality and Social Psychology, 101*, 109-128. doi:10.1037/a0022530
- Glick, P., Zion, C., & Nelson, C. (1988). What mediates sex discrimination in hiring decisions? *Journal of Personality and Social Psychology, 55*, 178-186. doi:10.1037/0022-3514.55.2.178
- Hall, C. W., Davis, N. B., Bolen, L. M., & Chia, R. (1999). Gender and racial differences in mathematical performance. *Journal of Social Psychology, 139*, 677-689. doi:10.1080/00224549909598248
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues, 57*, 657-674.
- Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. *Journal of Applied Psychology, 90*, 431-441. doi:10.1037/0021-9010.90.3.431
- Heilman, M. E., & Okimoto, T. G. (2007). Why are women penalized for success at male tasks?: The implied communality deficit. *Journal of Applied Psychology, 92*, 81-92. doi:10.1037/0021-9010.92.1.81
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology, 89*, 416-427. doi:10.1037/0021-9010.89.3.416
- Hess, U., Senécal, S., Kirouac, G., Herrera, P., Philippot, P., & Kleck, R. E. (2000). Emotional expressivity in men and women: Stereotypes and self-perceptions. *Cognition & Emotion, 14*, 609-642. doi:10.1080/02699930050117648

- Jacobs, J. E. (1991). Influence of gender stereotypes on parent and child mathematics attitudes. *Journal of Educational Psychology*, 83, 518-527. doi:10.1037/0022-0663.83.4.518
- Koch, A. J., D'Mello, S. D., & Sackett, P. R. (2014). A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making. *Journal of Applied Psychology*, 1-35. doi:10.1037/a0036734
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, 137, 616-642. doi:10.1037/a0023557
- Levin, I. P., Rouwenhorst, R. M., & Trisko, H. M. (2005). Separating gender biases in screening and selecting candidates for hiring and firing. *Social Behavior and Personality*, 33, 793-804. doi:10.2224/sbp.2005.33.8.793
- Meltzer, A. L., & McNulty, J. K. (2011). Contrast effects of stereotypes: 'Nurturing' male professors are evaluated more positively than 'nurturing' female professors. *The Journal of Men's Studies*, 19, 57-64. doi:10.3149/jms.1901.57
- Okimoto, T. G., & Brescoll, V. L. (2010). The price of power: Power seeking and backlash against female politicians. *Personality and Social Psychology Bulletin*, 36, 923-936. doi:10.1177/0146167210371949
- Oswald, D. L. (2008). Gender stereotypes and women's reports of liking and ability in traditionally masculine and feminine occupations. *Psychology of Women Quarterly*, 32, 196-203. doi:10.1111/j.1471-6402.2008.00424.x
- Prentice, D. A., and Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269-281. doi:0361-6843/02

- Plant, E., & Hyde, J. (2000). The gender stereotyping of emotions. *Psychology of Women Quarterly*, 24, 81-92. doi:10.1111/j.1471-6402.2000.tb01024.x
- Sample performance comments. (n.d.). Retrieved June 24, 2014, from "Sample Performance Comments." Southeastern Louisiana University. Southeastern Louisiana University, n.d. Web. 24 July 2014.
- Steffens, M. C., Jelenec, P., & Noack, P. (2010). On the leaky math pipeline: Comparing implicit math-gender stereotypes and math withdrawal in female and male children and adolescents. *Journal of Educational Psychology*, 102, 947-963. doi:10.1037/a0019920
- Tiedemann, J. (2000). Parents' gender stereotypes and teachers' beliefs as predictors of children's concept of their mathematical ability in elementary school. *Journal of Educational Psychology*, 92, 144-151. doi:10.1037/0022-0663.92.1.144
- Timmers, M., Fischer, A. H., & Manstead, A. R. (2003). Ability versus vulnerability: Beliefs about men's and women's emotional behaviour. *Cognition and Emotion*, 17, 41-63. doi:10.1080/026999303022277
- Tomasetto, C., Alparone, F., & Cadinu, M. (2011). Girls' math performance under stereotype threat: The moderating role of mothers' gender stereotypes. *Developmental Psychology*, 47, 943-949. doi:10.1037/a0024047
- Voyer, D., & Voyer, S. D. (2014). Gender differences in scholastic achievement: A meta-analysis. *Psychological Bulletin*, 140, 1174-1204. doi:10.1037/a0036620

Table 1

Gender x Job Title x Helpfulness Condition Factorial Analysis of Variance for Hirability

Source	<i>df</i>	<i>F</i>	<i>p</i>	η^2
Gender	1	1.89	.17	.02
Job Title	1	1.85	.17	.02
Helpfulness Condition	2	13.38**	.00	.18
Gender x Job Title	1	1.28	.26	.01
Gender x Helpfulness Condition	2	0.26	.77	.00
Job Title x Helpfulness Condition	2	2.28	.11	.04
Gender x Job Title x Helpfulness Condition	2	0.77	.47	.01
Error	122			

Note: Gender = Gender of applicant* $p < .05$ ** $p < .001$

Table 2

Applicant Gender x Helpfulness Condition Analysis of Variance for Helpfulness Rating

Source	<i>df</i>	<i>F</i>	<i>p</i>	η^2
Gender of Applicant	1	3.91*	.05	.03
Helpfulness Condition	2	45.14**	.00	.41
Gender of Applicant x Helpfulness Condition	2	0.94	.39	.01
Error	122			

Note: Gender = Gender of applicant* $p < .05$ ** $p < .001$

Table 3

Participants per Condition Before and After Manipulation Check Exclusion

Condition	Total Before	Total After
COS A H	13	12
COS A C	13	11
COS A U	14	13
COS D H	13	13
COS D C	14	10
COS D U	14	12
SEC A H	12	9
SEC A C	13	10
SEC A U	13	10
SEC D H	11	10
SEC D C	13	10
SEC D U	15	14
Totals	158	134

Note: Abbreviations are explained as follows:

“COS” = Executive Chief of Staff (masculine position)

“SEC” = Executive Secretary (feminine position)

“A” = Amy (female applicant)

“D” = David (male applicant)

“H” = Helpful condition

“C” = Control condition

“U” = Unhelpful condition

Appendix A: Executive Chief of Staff Job Description**JOB DESCRIPTION**

JOB TITLE: EXECUTIVE CHIEF OF STAFF

REPORTS TO: SENIOR EXECUTIVE

SUMMARY OF POSITION:

The Executive Chief of Staff works for a senior executive in a complete sense. An Executive Chief of Staff must have a high level understanding of the executive's work and the company so that the executive may appropriately delegate work which may be complex. The duties involve giving instructions to other staff, using considerable judgment to make routine and non-routine decisions, and representing the executive's views when the executive is not available. Also, the Executive Chief of Staff is responsible for supervising several secretaries and other office staff.

Supervision of staff consists of delegating routine tasks to a number of work groups varying in the complexity of work. The Executive Chief of Staff personally coordinates the work of the groups, maintains standards of quality and performance, decides training programs, maintains morale, makes decisions regarding work priorities, and assists with selection of new staff.

Other duties include receiving visitors, dealing personally with telephone inquiries, planning travel itineraries in the US and abroad, providing information on routine matters of the executive's work, generally dealing with routine affairs not delegated to an assistant and, in the executive's absence, making arrangements for important matters to be dealt with

Appendix B: Executive Secretary Job Description**JOB DESCRIPTION**

JOB TITLE: EXECUTIVE SECRETARY

REPORTS TO: SENIOR EXECUTIVE

SUMMARY OF POSITION:

The Executive Secretary works for a senior executive in a complete sense. An Executive Secretary must have a high level understanding of the executive's work and the company so that the executive may appropriately delegate work which may be complex. The duties involve giving instructions to other staff, using considerable judgment to make routine and non-routine decisions, and representing the executive's views when the executive is not available. Also, the Executive Secretary is responsible for supervising several secretaries and other office staff.

Supervision of staff consists of delegating routine tasks to a number of work groups varying in the complexity of work. The Executive Secretary personally coordinates the work of the groups, maintains standards of quality and performance, decides training programs, maintains morale, makes decisions regarding work priorities, and assists with selection of new staff.

Other duties include receiving visitors, dealing personally with telephone inquiries, planning travel itineraries in the US and abroad, providing information on routine matters of the executive's work, generally dealing with routine affairs not delegated to an assistant and, in the executive's absence, making arrangements for important matters to be dealt with.

Appendix C: Job Position Questionnaire**JOB POSITION QUESTIONNAIRE**

1. What was the exact title of the job position you just reviewed?
 - a. Executive Secretary
 - b. Sales Representative
 - c. Executive Chief of Staff
 - d. Customer Service Professional
2. What percentage breakdown would you estimate is representative of men and women who occupy that position across the U.S.?
 - a. Men (30%) and Women (70%)
 - b. Men (40%) and Women (60%)
 - c. Men (50%) and Women (50%)
 - d. Men (60%) and Women (40%)
 - e. Men (70%) and Women (30%)
3. What would you estimate the average annual salary is for employees in that position across the U.S.?
 - a. Lower than or equal to \$30,000
 - b. \$35,000
 - c. \$40,000
 - d. \$45,000
 - e. \$50,000
 - f. \$55,000
 - g. Higher than or equal to \$60,000
4. How would you estimate the job outlook is for that position in the U.S.?
 - a. Fewer positions available than people to fill them (poor outlook)
 - b. A proportional amount of available positions and people to fill them (decent outlook)
 - c. More positions available than people to fill them (excellent outlook)

Appendix D: Female Applicant Resume**Amy Marie Johnson**

amjohnson@gmail.com

512 Elm Street, Wayzata, MN 55391

(612) 215 7743

Executive Assistant

Dynamic professional with some experience in organizational administration, computer/technical support, and office management. Versed in staff supervision, scheduling, reporting, office logistics, and service provider management. Detailed understanding of policies, procedures, and office politics. Effective in the management of top organizational initiatives. Maintain great written and oral communication skills, problem resolution abilities, and a high level of confidentiality.

Administrative Skills

Microsoft Office (Word, Excel, Outlook, PowerPoint, Access, Publisher)
Oracle Calendar, Type 50 WPM

Professional Experience

Executive Assistant***Global Systems International, Wayzata, MN 55391******April 2006 - present***

- Provide administrative support to upper level executives
- Coordinate corporate and special events
- Process expense reports and supporting documents
- Collaborate with departmental managers and staff

General Office Clerk***GCF Incorporation, St. Paul, MN 55102******August 2000 – March 2006***

- Perform writing, typing, and entering information into computer
- Arrange file records
- Distribute information to staff
- Copy documents

Customer Specialist***Smith & Sons Enterprises, Plymouth, MN 55447******October 1998 – May 2000***

- Assist customers with regular information and concerns
- Provide appropriate support for areas in need
- Address and resolve problems
- Consult customers to analyze business needs

Education

Associate's Degree in Business Management (May, 2000)

MN School of Business, Plymouth, MN 55447

GPA: 2.9

Appendix E: Male Applicant Resume**David Michael Johnson**

dmjohnson@gmail.com

512 Elm Street, Wayzata, MN 55391

(612) 215 7743

Executive Assistant

Dynamic professional with some experience in organizational administration, computer/technical support, and office management. Versed in staff supervision, scheduling, reporting, office logistics, and service provider management. Detailed understanding of policies, procedures, and office politics. Effective in the management of top organizational initiatives. Maintain great written and oral communication skills, problem resolution abilities, and a high level of confidentiality.

Administrative Skills

Microsoft Office (Word, Excel, Outlook, PowerPoint, Access, Publisher)
Oracle Calendar, Type 50 WPM

Professional Experience

Executive Assistant***Global Systems International, Wayzata, MN 55391******April 2006 - present***

- Provide administrative support to upper level executives
- Coordinate corporate and special events
- Process expense reports and supporting documents
- Collaborate with departmental managers and staff

General Office Clerk***GCF Incorporation, St. Paul, MN 55102******August 2000 – March 2006***

- Perform writing, typing, and entering information into computer
- Arrange file records
- Distribute information to staff
- Copy documents

Customer Specialist***Smith & Sons Enterprises, Plymouth, MN 55447******October 1998 – May 2000***

- Assist customers with regular information and concerns
 - Provide appropriate support for areas in need
 - Address and resolve problems
 - Consult customers to analyze business needs
-

Education

Associate's Degree in Business Management (May, 2000)

MN School of Business, Plymouth, MN 55447

GPA: 2.9

Appendix F: Employee Evaluation Form – Helpful Condition

GLOBAL SYSTEMS INTERNATIONAL*Helping Serve Our Clients in a Globalized World*

(763) 931 2452 | globalsystemsinternational.com

EMPLOYEE EVALUATION FORM

Name of Employee Being Evaluated:

David/Amy Johnson

Name of Employee Completing Evaluation:

Jordan Murphy

Rate the employee's work performance by indicating whether they demonstrated poor (1), fair (2), average (3), good (4) or excellent (5) work behavior. Please be honest.

	Poor	Fair	Average	Good	Excellent
	1	2	3	4	5
Planning and Organizing				√	
Follow Through				√	
Dependability					√
Efficiency				√	
Accuracy				√	
Accepting of responsibility				√	
Versatility			√		
Capacity to work					√
Emotional Stability				√	

Please describe the employee's typical work behavior:

David/Amy arrives to work on time and makes sure his/her work area is always covered. His/her work is completed on time with minimal errors. He/she strives to improve work performance, takes pride in his/her work, and has shown he/she is a team player. David/Amy is usually able to answer customer questions and uses good judgment in solving problems and working with others. He/she adjusts moderately well to changes in the work place. Once I was in a panic because I had to make copies of some presentation materials for an important meeting the next morning. The copy machine broke down on me and would not collate or staple the pages. It was 5:15 and all the support staff was gone, and everyone else was preparing to go out for another coworker's birthday dinner. We'd all been looking forward to it. I ran around looking for help to manually collate and staple the 500 pages. When David/Amy learned what had happened, he/she immediately volunteered to help me even though he/she would miss part of the dinner. That's just the way David/Amy is.

Appendix G: Employee Evaluation Form – Unhelpful Condition

GLOBAL SYSTEMS INTERNATIONAL*Helping Serve Our Clients in a Globalized World*

(763) 931 2452 | globalsystemsinternational.com

EMPLOYEE EVALUATION FORM

Name of Employee Being Evaluated:

David/Amy Johnson

Name of Employee Completing Evaluation:

Jordan Murphy

Rate the employee's work performance by indicating whether they demonstrated poor (1), fair (2), average (3), good (4) or excellent (5) work behavior. Please be honest.

	Poor	Fair	Average	Good	Excellent
	1	2	3	4	5
Planning and Organizing				√	
Follow Through				√	
Dependability					√
Efficiency				√	
Accuracy				√	
Accepting of responsibility				√	
Versatility			√		
Capacity to work					√
Emotional Stability				√	

Please describe the employee's typical work behavior:

David/Amy arrives to work on time and makes sure his/her work area is always covered. His/her work is completed on time with minimal errors. He/she strives to improve work performance, takes pride in his/her work, and has shown he/she is a team player. David/Amy is usually able to answer customer questions and uses good judgment in solving problems and working with others. He/she adjusts moderately well to changes in the work place. Once I was in a panic because I had to make copies of some presentation materials for an important meeting the next morning. The copy machine broke down on me and would not collate or staple the pages. It was 5:15 and all the support staff was gone, and everyone else was preparing to go out for another coworker's birthday dinner. We'd all been looking forward to it. I ran around looking for help to manually collate and staple the 500 pages. When David/Amy learned what had happened, he/she said he/she could not help me because he/she was on his/her way to the party but suggested I try to find a copy shop that was still open. That's just the way David/Amy is.

Appendix H: Employee Evaluation Form – Unhelpful Condition

GLOBAL SYSTEMS INTERNATIONAL*Helping Serve Our Clients in a Globalized World*

(763) 931 2452 | globalsystemsinternational.com

EMPLOYEE EVALUATION FORM

Name of Employee Being Evaluated:

David/Amy Johnson

Name of Employee Completing Evaluation:

Jordan Murphy

Rate the employee's work performance by indicating whether they demonstrated poor (1), fair (2), average (3), good (4) or excellent (5) work behavior. Please be honest.

	Poor	Fair	Average	Good	Excellent
	1	2	3	4	5
Planning and Organizing				√	
Follow Through				√	
Dependability					√
Efficiency				√	
Accuracy				√	
Accepting of responsibility				√	
Versatility			√		
Capacity to work					√
Emotional Stability				√	

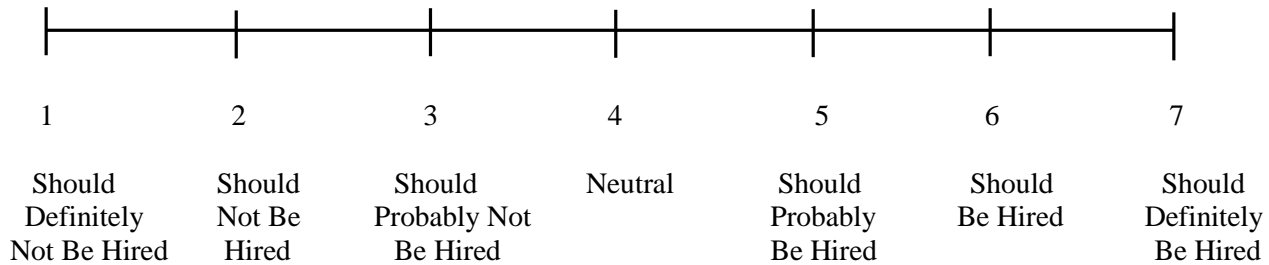
Please describe the employee's typical work behavior:

David/Amy arrives to work on time and makes sure his/her work area is always covered. His/her work is completed on time with minimal errors. He/she strives to improve work performance, takes pride in his/her work, and has shown he/she is a team player. David/Amy is usually able to answer customer questions and uses good judgment in solving problems and working with others. He/she adjusts moderately well to changes in the work place. Once I was at an employee meeting where it was David/Amy's responsibility to present a status report to the group on a recent project being developed. David/Amy's presentation was informative and clear. He/she made sure to keep the meeting on schedule and he/she provided us with handouts. That's just the way David/Amy is.

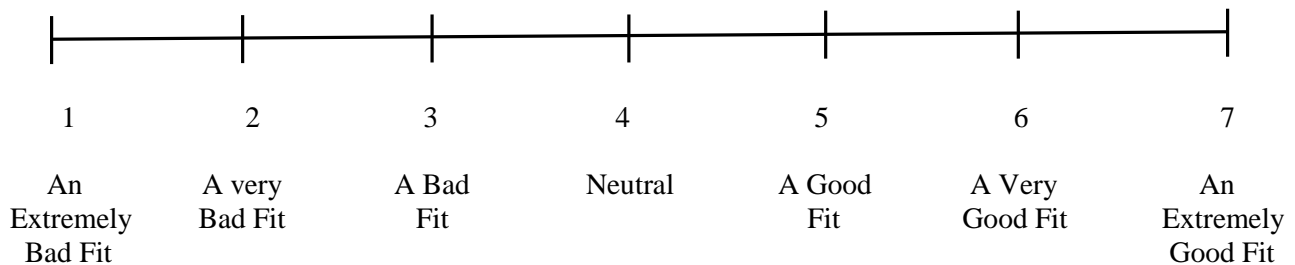
Appendix I: Questionnaire
PERSONNEL MANAGER QUESTIONNAIRE

Please complete a few questions about the applicant you just reviewed.

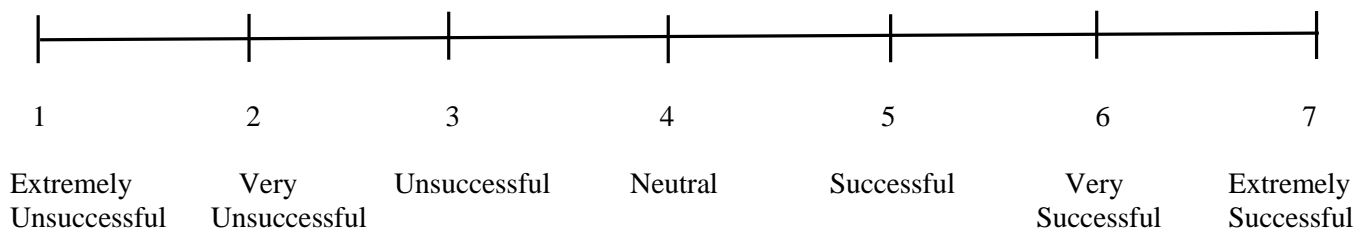
Should this person be hired? Circle your response.



Is this person a good fit for the job? Circle your response.

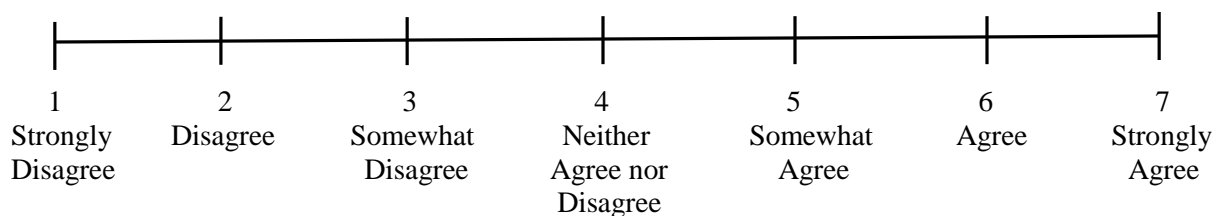


How successful would this person be in this position? Circle your response.



In your own words, please explain your responses to the previous three questions:

In addition, we would like to know your impression of the applicant's personality characteristics. Please indicate your level of agreement that the applicant you just reviewed possesses these traits:



	1	2	3	4	5	6	7
Dependable							

	1	2	3	4	5	6	7
Caring							

	1	2	3	4	5	6	7
Shy							

	1	2	3	4	5	6	7
Supportive							

	1	2	3	4	5	6	7
Competent							

	1	2	3	4	5	6	7
Selfish							

	1	2	3	4	5	6	7
Understanding							

	1	2	3	4	5	6	7
Self-Reliant							

	1	2	3	4	5	6	7
Arrogant							

	1	2	3	4	5	6	7
Patient							

	1	2	3	4	5	6	7
Ambitious							

	1	2	3	4	5	6	7
Uncooperative							

	1	2	3	4	5	6	7
Hard-working							

Warm	1	2	3	4	5	6	7
Inconsiderate	1	2	3	4	5	6	7
Creative	1	2	3	4	5	6	7
Fair	1	2	3	4	5	6	7
Aggressive	1	2	3	4	5	6	7
Helpful	1	2	3	4	5	6	7
Sensitive	1	2	3	4	5	6	7
Unsupportive	1	2	3	4	5	6	7

In your own words, please describe the applicant's personality

What was the gender of the person you just evaluated? Circle your response

Male

Female

What was the job position that the person you evaluated was applying for?

What is your age?

What is your gender?

What is your major?

Do you have a minor? If so, what is it?

How many semesters have you attended college?

What is your cumulative GPA?